## **REMARKS**:

In the foregoing amendments, claims 33 and 45 were amended to correct editorial matters. The amendment to claim 45 corrects the dependency thereof, which was mentioned in the objection to claim 45 on page 4 of the Official action. Accordingly, applicant respectfully requests that the examiner reconsider and withdraw this objection to claim 45.

The amendment to claim 33 inserts the word "only" at the beginning of the last paragraph thereof. Similar language is used in the last paragraph of claim 38 and other claims. Therefore, the examiner already considered this limitation, and this limitation does not raise any new issues requiring further consideration and/or search. The foregoing amendments were made to clarify what was already implied in applicant's claims and these amendments are not narrowing amendments and were not made for reasons substantially related to patentability presented.

Therefore, applicant respectfully request that the amendments to claims 33 and 45 be entered under the provisions of 37 C.F.R. §1.116(b) for the purposes of placing the application in condition for allowance or for the purposes of appeal.

Claims 33-64 remain in the application for consideration by the examiner.

Reconsideration and allowance of these claims are respectfully requested for at least the following reasons.

## Prior Art Rejection

Claims 33-64 were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,952,680 of Melby *et al.* (Melby) in view of U.S. Patent No. 5,646,844 of Gudat *et al.* (Gudat). This rejection spans pages 4-54 of the Official action. Applicant respectfully

submits that the inventions defined in claims 33-64 are patently distinguishable from the teachings of Melby for the reasons set forth in the responses filed on March 20, 2006 and February 12, 2007, which are incorporated herein by reference. In addition, applicant respectfully submits that the inventions defined in claims 33-64 are patently distinguishable from the teachings of Melby and/or Gudat for at least the following reasons.

Independent claims 33, 38, 42, 46, 48, 62, 63, and 64 define a work machine management system including, *inter alia*, the following structures and arrangements:

- (i) a plurality of work machines, the plurality of work machines respectively including a first communication means facilitating reciprocal communications directly between the plurality of work machines;
- (ii) a server apparatus; wherein at least one leader machine of the plurality of work machines and the server apparatus including second communication means facilitating reciprocal communications between the server apparatus and the at least one leader work machine of the plurality of work machines; and
- (iii) the server apparatus producing the management information based on the transmitted work machine information and on the data stored in the database, and transmitting the management information so produced *directly only* to the at least one leader work machine through the second communication means; and *only* the at least one leader work machine transmitting work instructions to other work machines of the plurality of work machines through the first communication means, based on the transmitted management information.

According to these structures and arrangements of the presently claimed inventions, an operator of the leader machine, who is able to see (directly with his eyes) the movement of subordinate machines located at the same site as the leader machine is located, can give proper work instructions to the subordinate machines according to changes of the situation at the site on the basis of the management information transmitted from the server apparatus.

The teachings of Melby do not contemplate or suggest the previously mentioned structures and arrangements (ii) and (iii) as required in independent claims 33, 38, 42, 46, 48, 62, 63, and 64. With respect to the aforesaid structures and arrangements (ii), the Official action stated on page 8 that these structures and arrangements are disclosed in Melby at col. 11, lines 42-44 and claim 9. However, as described at col. 11, lines 37-41 of Melby, an electronic management report generated by a remote analysis system 50 (allegedly corresponding to the presently claimed server apparatus (11)) is transmitted directly to asset 31 respectively. Further, the teachings of Melby do not include, contemplate, or suggest the above-mentioned structures and arrangements (ii) of applicant's claims in that the management report generated by the analysis system 50 therein is used as shared information, namely by a person or an entity that owns and operates the asset 31. Accordingly, within the teachings of Melby, each operator of the work machine has to operate the work machine respectively based on the management information transmitted from the server apparatus to the respective work machines. At least for this reason, the teachings of Melby cannot include, contemplate, or suggest a configuration that the management information produced by the server apparatus is transmitted directly only to the leader work machine, as required in the structures and arrangements (iii) of the present claims.

In contrast to the inventions defined in independent claims 33, 38, 46, 48, and 62-64, the teachings of Melby cannot contemplate or suggest that an asset 31 provides proper work instructions to the subordinates according to changes of the situation at the site based on the management information transmitted from the presently claimed server apparatus.

The teachings of Gudat do not cure or rectify the aforesaid deficiencies in the teachings of Melby. For example, the teachings of Gudat neither disclose nor suggest the above-mentioned structures and arrangements (iii), as presently claimed. Similar to the deficiency in the teachings of Melby, the teachings of Gudat do not disclose or contemplate the aforesaid structures and arrangements of the present claims enabling an operator of a leader machine who is able to see (directly with his eyes) the movement of subordinate machines located at the same site as the leader machine is located, and who can give proper work instructions to the subordinate machines according to changes of the situation at the site, on the basis of the management information transmitted from the server apparatus.

With respect to the teachings of Gudat, the Official action cited column 3, line 62-64 and the abstract thereoft, as teaching transmitting positional signals to and from another machine. The Official action indicated the structure and procedures proposed by Gudat streamline the communication process. However, applicant respectfully submits that the teachings of Gudat would not streamline the communication process of Melby or that set forth in the present claims, because additional communications are necessary between the machines and separate databases are required within each machine based on the teachings of Gudat. Therefore, there is no reason within the teachings of Gudat for one of ordinary skill in the art to would modify the device proposed by Melby with that proposed by Gudat. At least for this reason, the presently claimed

invention is patently distinguishable from the combined teachings of Melby and Gudat within the meaning of 35 U.S.C. §103(a).

For at least the foregoing reasons, applicant respectfully submits that the above-mentioned structures and arrangements (ii) and (iii) are not contemplated or suggested by Melby and/or Gudat within the meaning of 35 U.S.C. §103(a). Therefore, applicant respectfully submits that independent claims 33, 38, 46, 48, and 62-64, as well as the claims that depend thereon, are patently distinguishable from the teachings of Melby and/or Gudat and any rejection of applicant's claims over these teachings should be reconsidered and withdrawn.

Applicant respectfully submits that the eight statements of Official notice (or common knowledge in the art) as set forth in the outstanding Office action do not cure or rectify the aforesaid deficiencies in the teachings of Melby and/or Gudat. A detailed explanation of the deficiencies in the eight statements of Official notice (or common knowledge in the art) is discussed below. The positions of Official notice (or common knowledge in the art) as set forth in the outstanding Office amount to taking Official notice of knowledge that is normally subject to the possibility of rational disagreement among reasonable men. Further, the reliance on the eight statements of Official notice (or common knowledge in the art) in the outstanding Office action without evidentiary support in the record, as principal evidence upon which a rejection is based, is improper. As the Court held in *In re Zurko*, 258 F.3d 1379, 59 USPQ2d 1693, 1697 (Fed. Cir. 2002), an assessment of basic knowledge and common sense that is not based on any evidence in the record lacks substantial evidence support necessary to sustain a rejection under 35 U.S.C. §103.

For at least these reasons and those set forth in the responses filed on March 20, 2006 and February 12, 2007, applicant respectfully submits that the inventions defined in claims 33-64 are patently distinguishable from the teachings of Melby and/or Gudat within the meaning of 35 U.S.C. §102 and 35 U.S.C. §103. Therefore, applicant respectfully requests that the examiner reconsider and withdraw any rejections of the present claims over these teachings.

## Official Notice

From the applicant's review, the Official action took Official notice or stated that the following eight facts are common knowledge (hereinafter collectively referred to as "alleged statements of common knowledge").

- (1) It is old and well known in the art to notify relevant parties of the status and availability (or unavailability) of a work machine at a site (page 3 of the Official action),
- (2) Connecting data terminals to an electronic communication network, such as the Internet, is a step that is old and well known in the art (page 3 of the Official action),
- (3) Displaying information is old and well known in the art (page 4 of the Official action),
- (4) It is old and well known in the art for work plans to comprise a plurality of tasks (page 4 of the Official action),
- (5) It is well known in the art to assign resources to schedule tasks (page 4 of the Official action),
- (6) It is old and well known in the art to collect data regarding environmental conditions (page 4 of the Official action),
- (7) Local, federal and international ordinances, regulations, and laws govern acceptable noise levels and toxic chemical concentration limits for areas in which work is performed (page 4 of the Official action), and
- (8) It is old and well known in the art to distribute information only to leaders, who, in term propagate the distribution information to subordinates as necessary (Newly raised in the outstanding Office Action on page 9 thereof).

The outstanding Office action also stated that the aforesaid alleged statements (1)-(7) of common knowledge were not seasonably traversed (challenged), and the applicant's right to

challenge the Official Notice (statements of common knowledge) has somehow been waived. Firstly, applicant submits that aforesaid alleged facts (1)-(7) of common knowledge were timely challenged, which will be discussed in more detail below. Secondly, there is no rule of law or Patent Office rule setting forth a specific time limit for challenging Official Notice (statements of common knowledge) after which a penalty applies to the applicant.

In this connection, it is respectfully noted that in Ex parte Kobayashi et al., Appeal No. 1999-0349, Application No. 08/621,379, the PTO Board of Patent Appeals and Interferences (Board) stated that although the appellant should have traversed the examiner statement that antireflection coating sunglass are well-known prior art in the subsequent response instead of the response filed under 37 C.F.R. §1.116, the examiner could have added a reference showing the well-known prior art in the examiner's answer. Such a showing by the examiner would not have created a new ground of rejection. The Board continued that while antireflection coating coatings on glass are commonly known, there is no evidence of record to established the unobviousness of the specifically claimed location on the inside of the inner glass of the plate of the cited teachings of Hashimoto. In other words, the Board stated the traversal of a statement of well-known prior art, such as the aforesaid statement of common knowledge, is timely in response after final under 37 C.F.R. §1.116, such as the present response. In addition, the Board stated that there must be a relationship between the evidence of record (alleged commonly known fact) and the other teachings in order to establish unobviousness, which relationship is not present in the prior art rejection of applicant's claims in the outstanding Office action.

Accordingly, applicant again hereby traverses the aforesaid alleged facts (1)-(7) of common knowledge. Applicant also traverses the aforesaid alleged statement (8) which was

firstly proffered in the outstanding Office action. The examiner is reminded that the Board will not be able to sustain the prior art rejections set forth in the outstanding Office action without some form of evidence in the record to support the aforesaid alleged facts of common knowledge. See *In re Lee*, 277 F.3d 1338, 1344-45, 61 USPQ2d 1430, 1434-35 (Fed. Cir. 2002); *In re Zurko*, 258 F.3d 1379, 1386, 59 USPQ2d 1693, 1697 (Fed. Cir. 2002), which held that general conclusions concerning what is "basic knowledge" or "common sense" to one of ordinary skill in the art without specific factual findings and some concrete evidence in the record to support these findings will not support an obviousness rejection. This is because the standard of review applied to findings of fact (i.e., obviousness) is the "substantial evidence" standard under the Administrative Procedure Act (APA). See *In re Gartside*, 203 F.3d 1305, 1315, 53 USPQ2d 1769, 1775 (Fed. Cir. 2000).

Consider, for example, the aforesaid alleged statement (8) of common knowledge that it is old and well known in the art to distribute information only to leaders, who, in term propagate and distribute information to subordinates as necessary. What "art" is the examiner discussing here? Is this the situation used in professional football games, where a play is sent to the quarterback from the coach, who then communicates the play to the other players on the offense? Applicant respectfully submits that the examiner must cite a teaching reference in an area of art related to the invention of the present claims, before such a teaching can be considered common knowledge for the presently claimed invention. This teaching cannot be general human behavior. There must be some type of teaching or suggestion in the alleged common knowledge that would enable, and give a reason to, one of ordinary skill in the art to modify the teachings of Melby and/or Gudat to arrive at the presently claimed invention. In particular, applicant respectfully

submits that the examiner must cite a teaching reference in the area of a work machine management system for work machines that distributes work instructions *only* to a leader machine, and the leader work machine transmits the work instructions to other work machines of the plurality of work machines through a first communication means, based on the transmitted management information, as required in the independent claims of this application, before a *prima facie* case of obviousness can be established in the present factual situation. Therefore, the examiner should reconsider and withdraw any rejection of the present claims based on the foresaid alleged statement (8) of common knowledge.

Applicant's challenge (or traversal) concerning the aforesaid alleged statements (1)-(7) of common knowledge are similar. For example, where is it old and well known in the art to notify relevant parties of the status and availability (or unavailability) of a work machine at a site, the aforesaid alleged statement (1)? In order to be relevant to the present claims, such an alleged common knowledge must be in the area of a work machine management system for work machines, as presently claimed. Where and how is this done? How does the "art" relate to the presently claimed invention? Applicant invites the examiner to provide such evidence of common knowledge or withdraw the prior art rejections of the present claims.

The remaining alleged statements of common knowledge are challenged on the same grounds and/or for other reasons. For example, what does connecting data terminals to an electronic communication network, such as the Internet, in the alleged statement (2) of common knowledge, have to do with work machine management system for work machines, as presently claimed? The alleged statement (3) of common knowledge that displaying information is old and well known in the art is a very broad statement. Surely, the Official action is not taking the

position that any display of information is old and well known. Such a position is tantamount to taking the position that any display of information is old and well known, which is untenable.

The alleged statements (4) and (5) of common knowledge that it is old and well known in the art for work plans to comprise a plurality of tasks and to assign resources to schedule tasks seem overly broad and out of context. Is the Official action referring to hand-written information here? Applicant respectfully submits that some document or other tangible evidence concerning all the alleged statements of common knowledge must be cited, so that it can be determined how or why such evidence would provide a reason for one of ordinary skill in the art to modify the teachings of Melby and/or Gudat to arrive at the presently claimed invention. The factual underpinnings of obviousness must be based on facts, which facts are deficient in the prior art rejection of applicant's claims.

Consider, for example, the alleged statement (6) of common knowledge that it is old and well known in the art to collect data regarding environmental conditions. Does this refer to an environmentalist taking test samples in the field and later analyzing the test samples in a laboratory? Such a procedure would provide no reason to one of ordinary skill in the art to modify the teachings of Melby and/or Gudat so that the devices proposed therein would be enabled to do the same. Similarly, alleged statement (7) that local, federal and international ordinances, regulations, and laws govern acceptable noise levels and toxic chemical concentration limits for areas in which work is performed has nothing to do with work machines. Ordinances, regulations, and law governing acceptable noise levels and toxic chemical concentration limits, in general, cannot provide a reason to a person of ordinary skill in the art to

modify a work machine management system for work machines without providing at least some knowledge of how to so modify the teachings of Melby and/or Gudat.

In order to be relevant to the present claims, such alleged common knowledge must be in an area related to a work machine management system for work machines, as presently claimed. There must be some type of teaching or suggestion in the alleged common knowledge that would enable, and give a reason to, one of ordinary skill in the art to modify the teachings of Melby and/or Gudat to arrive at the presently claimed invention. The enablement and reasons to modify the teachings of Melby and/or Gudat must be in the record and based on factual evidence to establish a rejection based on prima facie obviousness. KSR lnt'l v. Teleflex Inc., 127 S. Ct. 1727, 1740-41, 82 USPQ2d 1385, 1396 (2007) citing *In re Kahn*, 441 F. 3d 977, 988 (Fed. Cir. 2006) ("[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness"). To determine whether there was an apparent reason to combine the known elements in the way a patent claims, it will often be necessary to look to interrelated teachings of multiple patents; to the effects of demands known to the design community or present in the marketplace; and to the background knowledge possessed by a person having ordinary skill in the art. KSR lnt'l v. Teleflex Inc., To facilitate review, this analysis should be made explicit. Since the prior art rejection of applicant's claims over the teachings of Melby and/or Gudat fail to do this, applicant respectfully requests that the examiner reconsider and withdraw these rejections.

Page 3 of the Official action set forth the following statements:

Applicant has not provided adequate information or arguments so that on its face he creates a reasonable doubt regarding the circumstances justifying the Official Notice. ... Bald statements such as, "the Examiner has not provided proof that this element is well known" or "applicant disagrees with the Examiner's taking of Official Notice and hereby requests evidence in support thereof," are not adequate and do not shift the burden to the Examiner to provide evidence in support of Official Notice.

Applicant respectfully submits that these statements concerning Official notice are in error and request that the examiner site support in the case law or Patent Office rules to sustain these positions or withdraw the same. For example, "reasonable doubt" is a standard used in criminal law and its application to Official notice in patent law is not appropriate. Further, the burden of proof is always on the examiner to establish a *prima facie* case of obviousness.

Applicant respectfully submit that it is improper for an examiner to rely on at least eight positions of Official notice, hold that the applicant's traversals of these eight positions of Official notice are somehow inadequate, and then maintain a prior art rejection based thereon. Such a position is arbitrary and capricious and cannot be tolerated.

As a final comment concerning the statements (1)-(8) of common knowledge as alleged in the Official action, Official notice without documentary evidence to support an examiner's conclusion is permissible only in some circumstances. While "Official notice" may be relied on, these circumstances should be rare when an application is under final rejection or action under 37 C.F.R. §1.113. See M.P.E.P. §2144.03. The fact that it was necessary to rely on eight statements of common knowledge in the final Office Action to establish a *prima facie* case of obviousness, one of which was newly presented; points to the inevitable conclusion that the

inventions defined in the present claims are patently distinguishable from the teachings cited thereagainst within the meaning of 35 U.S.C. §103.

In summary, applicant respectfully submits that, as described above, the cited prior art of Melby, Gudat and/or the eight statements of Official notice (or common knowledge in the art) as set forth in the outstanding Office action do not show or suggest the combination of features recited in the claims 33-64 within the meaning of 35 U.S.C. §103. Therefore, a formal allowance of these claims is respectfully requested.

The foregoing is believed to be a complete and proper response to the Official action mailed on May 7, 2007. While it is believed that all the claims in this application are in condition for allowance, should the examiner have any comments or questions, it is respectfully requested that the undersigned be telephoned at the below listed number to resolve any outstanding issues.

In the event that this paper is not timely filed, applicant hereby petitions for an appropriate extension of time. The Commissioner is hereby authorized to charge the fee therefor, as well as any deficiency in the payment of the required fee(s) or credit any overpayment, to our deposit account No. 50-1147.

Respectfully submitted,

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